

Appl. No. # 10/602,836

AMENDMENTS TO THE SPECIFICATION

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present embodiment includes a pair of canisters, a first canister for supplying crystal called a supply canister 205 and a second canister for storing crystal, the storage canister 210. The crystal begins in the first canister 205 and is connected by pathways [[conduits 305]] to the second canister 210. A vacuum 105 applied to the second canister 210 produces an air pressure imbalance that moves airflow. The airflow flows from the first canister 205 to the second canister 210. The crystals 405 stored in the first canister travel in the airflow and through a network of conduits to the second canister 210. The crystals 405 are retained in the storage canister 210 also called the second canister 210 by means of a filter 310 that prevents crystals from passing through.

Both canisters have tops 215 that can be opened for cleaning and replacement of crystal. The supply canister 205, initially full of crystals 405, has an Air inlet 315 on its top 215. The air inlet 315 further includes a filter 320 preventing dust and ambient suspended particles from entering the supply canister 205. The air filter 320 may be formed of a sponge-like material and disposed within a filter bore 220 located on the top of the supply canister top 215.

The supply canister 205 further includes a feeding conduit 325 formed of a metal tube intruding within the canister from the canister bottom 225 and rising vertically to a level above the pile of initial crystal supply. The feeding conduit 325 beginning with a metal tube open at the top continues through the bottom of the supply canister 205 and through the base of the canister rack 230 into the microdermabrasion machine 100 for the use on a patient.

The canister rack 230 holds the pair of canisters. The canister rack can be made of machined aluminum. The interface of the metal rack to the supply canister is a simple one. An O-ring 330 disposed around the bottom portion of the feeding conduit 325 maintains an airtight seal between the bottom bore [[220]] 255 in the bottom of the canister and the bore in the metal canister rack 235. The O-ring 330 holds itself in place by interference fit. Made of rubber, the O ring 330 fits snugly into a circumferential indentation surrounding the interface of the canister rack bore 235 and the supply canister bore [[220]] 255 so that the crystal experiences uninterrupted travel through both portions of the feeding conduit 325, namely the upper portion which is the metal tube and the lower portion which is a bore through the canister rack 230.

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The canister rack 230 also holds a storage canister 210 receiving used Crystal 410 from the microdermabrasion machine 100. The used Crystal 410 having been in contact with a person's skin may contain skin particles that should most likely be trapped within the storage canister 210.

The storage canister 210 has a pair of tubes protruding into the canister cavity 240. A first storage canister tube 250 extends vertically from a bottom bore 255, Fig. 4 in the bottom of the canister to an outlet above the level of a normal pile of crystal 405. The first storage canister tube 250 comprises a portion of the return conduit that returns used Crystal to the storage canister. The remainder of the return conduit is in the canister rack 230 and machine 100.

The second storage canister tube 260, 105 also extends vertically from a bore 255 in the bottom of the canister to outlets above the normal pile of crystal but further includes a filter 310 preventing crystal from leaving the canister. The second storage canister tube forms the top portion of the vacuum conduit 105. The vacuum conduit connects to a pump.

The first and second storage canister tube connects to respective bores in the bottom of the canister. A pair of O-rings 330 disposed around the bore 256, 257 extending into the base maintains an airtight seal between the bore in the bottom of the canister and the bore in the metal canister rack.

Both canisters have similar attachment means for attachment to the canister rack. A horizontal locking pin 350 on the inside face of each canister protrudes horizontally from the base of the canister and mates with a slot 351 in the canister rack, as seen in Fig. 2 shown in dotted line. A vertical locking pin 360 near the outside face on the canister rack protrudes vertically and mates with a slot in the bottom of the canister. The locking pin 350, Fig. 4 is a short protrusion. A pair of latches 370 formed on each outside face attaches each canister to the canister rack. The latch can be opened and closed by one hand. Preferably, the latch secures to a slot on the underside of the canister rack.

A machine operator begins with an empty pair of canisters. The operator opens the top of the supply of canister and fills the supply canister with crystals. The machine operator then aligns the supply canister so that the locking pin on the inside face of the canister aligns with the slot in the inside face of the canister rack. The machine operator then secures the latch of the inquiry canister now filled with crystals. As the operator secures the latch, the O-ring forms a

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seal that later allows continuous flow of crystals from the supply canister to the machine. The operator then secures the storage canister in a similar manner.